

Appl. No. : 10/090,414
Filed : February 28, 2002

REMARKS

Applicants respectfully request the Examiner to reconsider the above-captioned application in view of the above amendments and the following remarks.

Matters of Form

In response to the Examiner's objections to the Specification and Drawings, Applicants have amended paragraph 0025 of the Specification and canceled Claim 19. Claims 1, 7, 15, 20 and 21 have been also amended to correct the informalities noted by the Examiner.

Claim 2, 3 and 6 have been canceled as noted below. The dependency of Claims 4, 5 and 7 have been amended in light of the amendments to independent Claim 1 described below. Claim 18 has also been amended in light of the amendments to Claim 1.

Claim Rejections

Claims 1-13, 15-22 and 29-31 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. (USPN 6,447,232). Applicants respectfully disagree with the grounds for rejection. Nevertheless, to advance prosecution, Applicants have amended the pending claims as discussed below.

Specifically, Claim 1 has been amended to include the limitations of original Claims 2, 3 and 6, which have been canceled. As such, Claim 1 recites, in part, a buffering system comprising "a wafer carrier transfer mechanism that is configured to transfer the wafer carriers between the first I/O station and the shelves; wherein the wafer carrier transfer mechanism comprises a shuttle that includes a support positioned on a horizontal track and wherein the wafer carriers are transferred from the shelves by positioning the support under the shelves to interfere with the rotation of the wafer carrier on the wheel. the wafer carriers are transferred from the shelves by positioning the support under the shelves to interfere with the rotation of the wafer carrier on the wheel."

In rejecting original Claim 6, the Examiner did not identify any suggestion or motivation in Davis et al. for modifying the processing system such that the wafer carriers are transferred from the shelves by positioning the support under the shelves to interfere with the rotation of the wafer carrier on the wheel. Instead, the Examiner states that it would have been "an obvious design

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expedience to utilize the rotational movement of the inventory subassembly to accomplish the same result.”

Applicants respectfully submit that the mere fact that references can be modified does not render the resultant combination obvious unless the prior art also suggest the desirability of the combination. MPEP §2143.01. Moreover, in this case, the utilization of the rotational movement of the wheel to transfer the wafer carriers eliminates the need for pivoting movement rotational movement of the loading plate 60 disclosed by Davis et al. That is, to transfer the wafer carriers in Davis et al., the loading plate 60 is coupled to a motor and harmonic drive assembly 82 to rotate the leading edge 65 of the loading plate 60. Col. 6, lines 25-54. The claimed arrangement eliminates the need for this pivotal movement in order to load the wafer carriers onto the subassembly 90. “[T]he omission of an element and retention of its function is an indicia of unobviousness.” MPEP 2144.04.

Accordingly, Applicants respectfully submit that Claim 1 is in condition for allowance. Claims 2-5, 7-18 and 20-23 depend upon allowable Claim 1 and, for at least this reason, these claims are also in condition for allowance.

With respect to independent Claim 29, this claim has been amended to include the limitations of original Claim 31, which has been canceled. As such, Claim 29 recites, in part, a method for providing wafers to a wafer processing system comprising “transferring the wafer carrier from the one of a plurality of shelves by positioning a support of a shuttle above one of the shelves with the wafer carrier to interfere with the rotation of the shelf on the wheel.” As noted above, the cited art does not disclose, teach or suggest a method for providing wafers to a wafer processing system with the above-noted limitation. For at least this reason, Applicants submit that Claim 29 and dependent Claim 30 are in condition for allowance.

New Claim

Applicants have added new Claim 33, which corresponds to original dependent Claim 15. In the outstanding Office Action, the Examiner did not identify the specific grounds for rejecting Claim 15. Applicant respectfully notes that Davis et al. discloses the use of a loading plate 60 which is mounted on a guide track 70 and utilizes a motor and harmonic drive assembly 82 for loading the wafer carriers onto the subassembly 90. *Id.* As such, the cited art does not disclose,

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teach or suggest a buffering system for use with a wafer processing system wherein the first I/O station is configured such that a wafer carrier can be loaded directly onto the shelves. For at least this reason, Applicants submit that Claim 33 is in condition for allowance.

CONCLUSION

For the foregoing reasons, it is respectfully submitted that the rejections set forth in the outstanding Office Action are inapplicable to the present claims and specification. Accordingly, early issuance of a Notice of Allowance is most earnestly solicited.

The undersigned has made a good faith effort to respond to all of the rejections in the case and to place the claims in condition for immediate allowance. Nevertheless, if any undeveloped issues remain or if any issues require clarification, the Examiner is respectfully requested to call Applicants' attorney in order to resolve such issue promptly.

Respectfully submitted,

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Dated: July 6, 2004

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